

Application serial no. 09/995,697
Office Action dated February 23, 2006
Response dated April 28, 2006

REMARKS

We thank the Examiner for taking the time to speak with the undersigned on April 27, 2006. We discussed the rejection, our prior response and the Vahalia reference, and the basic arguments discussed below. The Examiner agreed we had a point and asked us to file an after final response and he will reconsider the rejection.

The Examiner has maintained his rejection claims 1 to 39 under U.S.C. 102(e) as being anticipated by Vahalia et al. in U.S. Patent No. 5,933,603.

In the "Response to arguments" on page 11 of the final action, the Examiner asserts that "the controller server ...(see col. 23 lines 55-col. 24 lines 25)...*inherently* has a switch fabric...and therefore meets the scope of the claimed limitation..."

We note that there is no "controller server" mentioned in col. 23 lines 55-col. 24 lines 25 - we assume the examiner is referring to the "stream server PC".

To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

The Final Action does not provide *any* basis in fact and/or technical reasoning to reasonably support the determination that a stream server PC necessarily includes a switch fabric, as asserted.

With respect, it does not. The stream server PC is a PC (personal computer), which are known to use a "bus" architecture. It uses a bus and does not have a

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switch fabric. This is clear from the following portion of the very section cited by the examiner (emphasis added):

In general, a stream server PC has a total buffer memory capacity limitation and a number of bandwidth limitations. The bandwidth limitations include a network bandwidth limitation, a throughput or buffer bandwidth limitation, and a bus bandwidth limitation for communication with the ICDA 23 and the tape silo 34. The throughput or buffer bandwidth limitation is **dependent on the type of bus used in the stream server PC.**

Newton's Telecom Dictionary (15th edition, 1999) defines a Bus as:

"An electrical connection which allows two or more wires or lines to be connected together. Typically, all circuit cards receive the same information that is put on the Bus. Only the card the information is "addressed" to will use that data. This is convenient so that a circuit may be plugged in "anywhere on the Bus." There are two common buses inside a PC – the older ISA bus, capable of only five megabytes per second and the newer PCI bus, capable of transmitting up to 132 megabytes per second. All computers and most telephone systems use buses of some type. Computer buses are typically open. Telephone system buses are typically closed. See also BACKPLANE and BUS NETWORK." (emphasis added)

A bus is not a switch fabric.

"Switch fabrics serve to interconnect the various functional units of a switch or router, in particular network and system processors (Fig. 1). The two basic functions of a packet switch fabric are the spatial transfer (switching) of packets from their incoming ports to the destination ports and the buffering of packets to resolve contention." (from Technologies and Building Blocks for Fast Packet Forwarding, Werner Bux, Wolfgang E. Denzel, Ton Engbersen, Andreas Herkersdorf, and Ronald P. Luijten, IBM Research, IEEE Communications Magazine, January 2001. A copy of which is enclosed). ✓

As implied by the Newton's Telecom Dictionary definition recited below, the woven material metaphor implied by the term is due to the often complex and web-like structure of switching paths and ports within a node.

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Definition from Newton's Telecom Dictionary: "Fabric: A descriptive term referring to the physical structure of a switch or network. Much like a piece of cloth, physical/logical communications channels (threads) are interwoven from port-to-port (end-to-end). Ideally, data are transferred through this switch or network on a seamless basis. In ATM and Fibre Channel, the switching fabric generally is non-blocking, or virtually so, from port-to-port. In the Internet, data works its way through a complex, and even unpredictable, interwoven network of networks comprising transmission facilities, packet switches and multiple carriers."

Accordingly the cited portions describe a stream server PC which uses a bus and not a switch fabric. Furthermore, a PC does not inherently have a switch fabric. In any event, the Examiner has failed to satisfy his burden of providing a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.

In any event, Valhalia certainly does not teach, and the stream server PC of the cited section does not inherently have a stream fabric as claimed. Without limited the generality of the foregoing, the server of Valhalia does not include "a stream fabric, coupled to the producer and the potential consumers, that operates to receive the substreams from the producer, store each substream within a stream queue associated with each data stream and select one of said plurality of potential consumers and output at least a portion of the data within the stream queue to the selected consumer" as claimed. Even if a server in Valhalia has a packet switch fabric, which is not admitted but denied, and Valhalia does not teach or suggest a stream fabric which operates on streams rather than conventional packets.

The Response to Arguments section fails to address most of our arguments for claims 2-39, apart from stating that we argued in substance Vahalia does not disclose processing at least a portion of data within the stream queue to select a consumer of the stream queue. This is not exactly what we argued, or what the claim recites, but for the purposes of responding, we state that col 23, lines 1-29 does not teach the either the claim limitations or the Examiner's summary. On page 12 of the final action, the Examiner states that Vahalia teaches selecting a stream server to service the client request according to the portion that is being requested, and then concludes that Vahalia therefore teaches processing at least a portion of data within

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the stream queue to select a consumer of the stream queue. However, selecting a stream server to service the client request according to the portion that is being requested, is NOT the same as processing at least a portion of data within the stream queue to select a consumer of the stream queue. Vahalia discusses serving data according to what is **requested** by the customer, and does not teach or suggest selecting the consumer by processing the data in the stream queue (which comes from the producer).

Accordingly, the response to arguments section of the Final Action (or generally) fails to support a valid 102 rejection to the claims. Once again, we re-iterate our response to the rejections. Without limiting the generality of the foregoing, we re-iterate that the rejections to claims 2 -39 fail to satisfy the Office's burden of demonstrating how each of the claim limitations are taught by the reference. The examiner states in the response to arguments section that we in substance argued Valhalia fails to teach 2 things A & B. the preceding paragraph refutes the assertion that Valhalia teaches A&B. Furthermore, in our prior response we argued that the rejections to the subsequent claims simply quoted the claim and then asserted that this was taught by the same sections, without elaboration. We argued that this was improper, and gave several examples of claims whose subject matter was even more clearly not taught by the cited sections, and these arguments have not been addressed.

Neither the initial rejection, or the response to arguments section establishes how Vahalia anticipates the claims.

Accordingly withdrawal of the rejections and favorable consideration is respectfully requested.

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No fee is believed due for this submission. However, Applicant authorizes the Commissioner to debit any required fee from Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP. The Commissioner is further authorized to debit any additional amount required, and to credit any overpayment to the above-noted deposit account.

Respectfully submitted,

KERR, Gordon ET AL.

By: _____

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1. Article